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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,320	10/15/2001	Hajime Seki	110-040	5302

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EXAMINER

MEONSKE, TONIA L

ART UNIT PAPER NUMBER

2181

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/926,320	<b>Applicant(s)</b> SEKI, HAJIME	
	<b>Examiner</b> Tonia L. Meonske	<b>Art Unit</b> 2181	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claim 20 is objected to because of the following informalities: In line 4, and similarly in lines 6, 10, and 15, the limitation “each designed to be able to hold” makes the metes and bounds of the claim unclear. Is applicant attempting to claim *designing, or implementing, a system* or attempting to claim *an already implemented system*. It appears that applicant is attempting to claim designing the stack management system, in an already implemented system claim. To avoid confusion, examiner suggests changing each instance of the limitation “each designed to be able to hold” to “each being able to hold”. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 20 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Shang et al., US Patent 5,974,531 (herein after Shang).

4. Referring to claim 20, Shang has taught a stack management system (Figure 1) for a computer system for executing operations involved in issued instructions to be applied to an operand stack out of order (This is an intended use limitation appearing in the preamble of the claim and is not accorded patentable weight.), comprising:

- a. a register file having entries each designed to be able to hold a word of data (Figure 1, column 3, line 25-column 4, line 26, Stack cache, including element 17 and the memory (not shown) storing the other elements of the stack),
- b. an advanced pointer stack having entries each designed to be able to hold an entry address in said register file, said advanced pointer stack being adapted, in combination with said register file, to virtually configure a state of the operand stack / uppermost part of the operand stack based on all issued instructions (Figure 1, column 3, line 25-column 4, line 26, decoded and pending instruction entries in element 16);
- c. a completed pointer stack having entries each designed to be able to hold an entry address in said register file, said completed pointer stack being adapted, in combination with said register file, to virtually configure a state of the operand stack / uppermost part of the operand stack based on all completed instructions (Figure 1, column 3, line 25-column 4, line 26, completed instruction entries in element 16);
- d. a data buffer constructed as a circular buffer having entries each designed to be able to hold a word of data (column 3, lines 49-61, memory (not shown) storing the other elements of the stack); and
- e. a data cache (Figure 1, element 17), wherein:
  - i. in case that the bottom entry of said advanced pointer stack and the bottom entry of said completed pointer stack hold an entry address in said register file, a word of data held in the entry of said register file of said entry address can be split into said data buffer, with both the hold of said entry address at the bottom of said advanced pointer stack and the hold of said entry address at the bottom of said

completed pointer stack removed (column 3, line 25-column 4, line 26, When an instruction in the reorder buffer is completed, the instruction is retired from the reorder buffer and then the register file, which is a part of the Stack Cache, is updated. When the register file is updated, the Stack cache splits data between element 17 and the memory (not shown) storing the other elements of the stack, in order to control stack growth.);

- f. said register file can be filled with a word of data from said data buffer by allocating a free entry of said register file to said word of data, writing said word of data into said entry of said register file, and having both the entry under the bottom of said advanced pointer stack and the entry under the bottom of said completed pointer stack hold the address of said entry of said register file (column 3, line 25-column 4, line 26, When an instruction completes and retires, the register file writes data into the data cache shown in Figure 1, element 21, thereby freeing up space in element 17. Then elements from the data buffer (or (not shown) memory) are spilled into element 17.); and
- g. spill/fill operations can be performed between said data buffer and said data cache (column 3, lines 49-61).

### ***Response to Arguments***

5. On page 1 of the remarks Applicant argues in essence:

*"The examiner refers to a stack management system for the computer system of Shang et al. The register file of the system of Shang et al is designed to hold words constituting (the uppermost part of) the operand stack in regular sequence. On the other hand, the register file of the system of the present application is designed to hold said words in random order. See in this regard page 19, lines 3-17 of the specification. The spill/fill mechanism according to the present invention is manifestly different from that disclosed in column 3, lines 50-61 of Shank et al cited by examiner."*

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However, Applicant is arguing a feature of the invention not specifically stated in the claim language, which is improper. Claimed subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978).

*"It is the claims that measure the invention." SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1121, 227 USPQ 577, 585 (Fed. Cir. 1985) (en banc).*

*"The invention disclosed in Hiniker's written description may be outstanding in its field, but the name of the game is the claim." In re Hiniker Co., 47 USPQ2d 1523, 1529 (Fed. Cir. 1998).*

*"[A]s an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." In re Morris, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).*

*"limitations appearing in the specification will not be read into the claims, and ... interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper'." Intervet Am., v. Kee-Vet Labs., 12 USPQ2d 1474, 1476 (Fed. Cir. 1989)(citation omitted).*

*"it is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim, ... this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. By 'extraneous,' we mean a limitation read into a claim from the specification wholly apart from any need to interpret ... particular words or phrases in the claim." In re Paulsen, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (citation omitted).*

In this case Applicant has not claimed that the register file holds words in random order. If applicant would like specific limitations from the specification read into the claims then Applicant should specifically claim those limitations. Therefore this argument is moot.

*Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

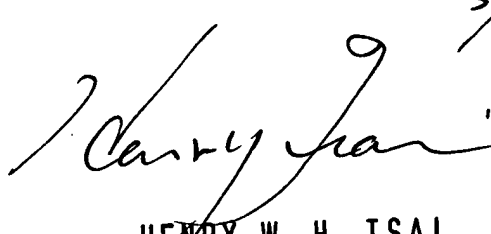
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L. Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday, with every other Friday off.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz Flemming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

 3/16/06  
HENRY W. H. TSAI  
PRIMARY EXAMINER